In re Appln. of ABE et al. Application No. Unassigned

-7

SPECIFICATION AMENDMENTS

Replace the paragraph beginning at page 2, line 1 with:

Through never-ending progress in downsizing of semiconductor chips, a semiconductor chip is now almost thinner than a lead frame. Such semiconductor chips have become highly dense, while densification of a semiconductor device mounting these semiconductor chips is insufficient. In particular, current semiconductor devices are not thin enough as thinning thereof has rarely received attention. Then, with a rapid prevalence of mobile data terminals like mobile phone phones, digital camera cameras, video camera and the like, there arise strong demands for downsizing and densification in consideration of the thickness of a semiconductor device. Downsizing and densification of a semiconductor device with its thickness reduced without an increase in area would provide desirable effects not only to in such uses as mentioned above but in many other uses.

Replace the paragraph beginning at page 11, line 10 with:

Figs. 10-to, 11, 12, and 13 respectively show cross sections along-A-A', B-B', C-C' and D-D' lines X-X, XI-XI, XII-XII, and XIII-XIII in Fig. 9.

Replace the paragraph beginning at page 11, line 12 with:

Figs. 14-to, 15, 16, and 17 respectively show cross sections of a semiconductor device according to a first modification of the first embodiment of the present invention corresponding to respective cross sections along-A-A', B-B', C-C' and D-D' lines X-X, XI-XI, XII-XII, and XIII-XIII in Fig. 9.

Replace the paragraph beginning at page 11, line 16 with:

Figs. 18-to, 19, 20, and 21 respectively show cross sections of a semiconductor device according to a second modification of the first embodiment of the present invention corresponding to respective cross sections along-A-A', B-B', C-C' and D-D' lines X-X, XI-XI, XII-XII, and XIII-XIII in Fig. 9.

In re Appln. of ABE et al. Application No. Unassigned

Replace the paragraph beginning at page 12, line 4 with:

Figs. 30-to 31, 32, and 33 respectively show cross sections along—A-A', B-B', C-C' and D-D' lines XXX-XXX, XXXI-XXXI, XXXII-XXXII, and XXXIII-XXXIII in Fig. 29.

Replace the paragraph beginning at page 12, line 6 with:

Fig. 35 shows a cross section along-A-A' line XXXV-XXXV in Fig. 34.

Replace the paragraph beginning at page 14, line 14 with:

Figs. 10-to, 11, 12, and 13 show respective cross sections along-A-A', B-B', C-C' and D-D' lines X-X, XI-XI, XII-XII, and XIII-XIII in Fig. 9. Components that are exposed after the adhesive tape is removed are encapsulated and fastened by means of an encapsulating resin. Although Figs. 10 to 13 show no wire connecting semiconductor chips 1a and 1b with leads 4a, the encapsulating resin has a thickness sufficient to encapsulate wires.

Replace the paragraph beginning at page 14, line 25 with:

A first modification of the first embodiment according to the present invention is described below. Figs. 14-to, 15, 16, and 17 respectively show cross sections of a semiconductor device corresponding to those along respective lines—A-A', B-B', C-C' and D-D' X-X, XI-XI, XII-XII, and XIII-XIII in Fig 9. In the first modification, a die pad 4b is processed such that it is shifted upward slightly. Naturally, according to the upward shifting of the die pad, upper and lower semiconductor chips 1a and 1b are both shifted upward. Other components are identical in structure to those of the first embodiment. An encapsulating resin thus extends under lower semiconductor chip 1b. Therefore, when an adhesive sheet is removed, lower semiconductor chip 1b and die pad 4b are never exposed on the rear side.

Replace the paragraph beginning at page 15, line 17 with:

Figs. 18-to, 19, 20 and 21 respectively show cross sections of a semiconductor device according to a second modification of the first embodiment, corresponding to those along respective lines—A-A', B-B', C-C' and D-D' X-X, XI-XI, XII-XII, and XIII-XIII in Fig 9. The

In re Appln. of ABE et al. Application No. Unassigned

second modification is characterized by the difference in thickness between upper and lower semiconductor chips 1a and 1b as compared with the embodiment discussed above. Other components are identical in structure to those of the first modification. A die pad 4b of the second modification is also shifted upward and thus the manufacturing method of the first modification can be applied.

Replace the paragraph beginning at page 17, line 16 with:

Figs. 30-to, 31, 32, and 33 are cross sections respectively along-A-A', B-B', C-C' and D-D' lines XXX-XXX, XXXI-XXXI, XXXII-XXXII, and XXXIII-XXXIII in Fig. 29. It can be understood from these drawings that the thickness of a semiconductor device of TSOP type can be reduced by arranging two semiconductor chips in the region surrounded by lead frames. In addition, the manufacturing method of the second embodiment employing spot welding to accomplish efficient production is suitable for low cost and mass production of semiconductor devices.